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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,497	06/29/2004	Egon Hubel	B-7193	4529

7590 05/04/2006
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EXAMINER

NICHOLSON III, LESLIE AUGUST

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. .	Applicant(s)	
	10/500,497	HUBEL, EGON	
	Examiner	Art Unit	
	Leslie A. Nicholson III	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments and Amendments

1. Due to Applicant's amendments and/or explanation, all objections to the specification and claims are hereby withdrawn.

Due to Applicant's amendments, all 35 USC 112 2nd paragraph rejections are hereby withdrawn.

Applicant's arguments, regarding Eriksson (USP 3945413), have been fully considered but they are not persuasive.

Regarding claim 1, Applicant argues Eriksson (USP 3945413) "does not show pairs of rollers that are disposed on a respective side of a plane of transportation", while the claim recites "at least one pair of rollers that are disposed on a respective side of the plane of transportation". Eriksson clearly shows a pair of rollers disposed on a respective side of a plane of transportation. The claim does not recite a roller disposed on each side of a plane.

Furthermore and regarding claim 17, the claims further recite "elevations... provided on the second roller of the pair of rollers on the other side of the plane of transportation", however this limitation was not positively recited earlier in the claim. The claim (17) recites (L4-6) "at least one pair of rollers... disposed on a respective side of the plane...", and as discussed above (Re clm 1), recites "at least one pair of rollers that are disposed on a respective side of the plane of transportation". The claims contradict themselves (as well as claim 14). The Examiner suggests rewording both

Art Unit: 3651

claims to recite (as an example) "a first roller and a second roller of a roller pair, said first roller lying on an opposite side of the plane of transportation from said second roller".

The Examiner notes that claims 14 and 16 were not included in the rejection heading for neither Eriksson nor Kunz due to typographical error. Claims 14 and 16 were shown as rejection in the Office Action Summary page while no allowable subject matter was indicated in the Action. Furthermore, claim 16 is shown as rejected on P5/L7-10 of the Action while the Applicant admits to seeing this rejection as stated on P11/L7-10 of the Arguments. Regarding claim 14, the Action shows the limitations of the claim as rejected on P5/L15-22, P6/L1-2.

Applicant's arguments with respect to claims rejected as being anticipated by Kunz (USP 3,132,785) have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,2,3,4,5,6,7,9,10,12,13,14,15,16,17, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Eriksson USP 3,945,413.

Eriksson discloses a similar device comprising:

- at least one pair of rollers (12) that are disposed on a respective side of the plane of transportation and are facing each other, said rollers having at least one elevation (2) encircling said rollers (fig.2)
- transport drives associated with said rollers, wherein the elevations on the first roller of a pair of rollers located on one side of the plane of transportation are staggered relative to the elevations provided on the second roller of the pair of rollers on the other side of the plane of transportation (fig.2)
- wherein said elevations are located along the plane of transportation in the region of the conveying path (see figures)
- wherein the elevations annularly or helically encircle the rollers (C2/L35-38)
- wherein several axially spaced apart elevations are provided on the at least one roller (fig.2)
- wherein there is provided at least one bordering elevation (21) at the end of the rollers, said bordering elevation annularly encircling the respective one of the rollers, having a diameter
- wherein said bordering elevations are disposed on the rollers of a pair of rollers so as to face each other (fig.2)
- wherein the minimum spacing between the rollers of a pair of rollers is set by the spacing between the bearings (17) of the rollers
- wherein the spacing between the elevations annularly encircling the rollers or the spacings between respective turns of the elevations helically encircling the rollers are at least 10% greater than the width of the elevations (fig.1,2)

- wherein the width of the elevations as well as the spacings between the elevations annularly encircling the rollers and the spacing between respective turns of the elevations helically encircling the rollers may range from 2 to 200 mm
- wherein the rollers are lengthened by at least the length of the bordering elevations at the ends of the rollers, wherein the bordering elevations at the ends of the rollers are located outside a useful area of a conveying path in the processing line (fig.1-3)
- wherein the rollers are made from at least one material selected from the group comprising metal, plastic material and ceramics (C2/L64-66)
- wherein the rollers provided with the elevations are configured to be formed by axles with rings secured thereon (C2/L35-39) (fig.1-3)

Eriksson discloses a similar method of transporting flat workpieces in conveyorized processing lines with a plane of transportation for the workpieces and with at least one pair of rollers, said rollers facing each other and being disposed on a respective side of the plane of transportation for transporting the workpieces, the rollers having at least one elevation encircling the rollers, the elevations on the first roller of a pair of rollers being staggered relative to the elevation on the second roller of the pair of rollers on the other side of the plane of transportation, and with transport drives associated with the rollers, the workpieces being supplied to the rollers of the at least one pair of rollers in the plane of transportation, said rollers transporting and finally releasing them (fig.1-3) (C1/L4-11).

Art Unit: 3651

4. Claims 1,2,3,7,9,11,12,14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Lehtinen USP 4,530,383.

Lehtinen discloses a similar device comprising:

- at least one pair of rollers (2) that are disposed on a respective side of the plane of transportation and are facing each other, said rollers having at least one elevation (2) encircling said rollers (fig.1,2)
- transport drives associated with said rollers, wherein the elevations on the first roller of a pair of rollers located on one side of the plane of transportation are staggered relative to the elevations provided on the second roller of the pair of rollers on the other side of the plane of transportation (fig.2)
- wherein said elevations are located along the plane of transportation in the region of the conveying path (fig.1,2)
- wherein the elevations annularly or helically encircle the rollers (fig.1,2)
- wherein several axially spaced apart elevations are provided on the at least one roller (fig.1,2)
- wherein the spacing between the elevations annularly encircling the rollers or the spacings between respective turns of the elevations helically encircling the rollers are at least 10% greater than the width of the elevations (fig.1,2)
- wherein the width of the elevations as well as the spacings between the elevations annularly encircling the rollers and the spacing between respective turns of the elevations helically encircling the rollers may range from 2 to 200 mm
- wherein the elevations have rounded front sides (fig.1,2)

Art Unit: 3651

- wherein the rollers are made from at least one material selected from the group comprising metal, plastic material and ceramics (C2/L25-27)

Lehtinen discloses a similar method of transporting flat workpieces in conveyorized processing lines with a plane of transportation for the workpieces and with at least one pair of rollers, said rollers facing each other and being disposed on a respective side of the plane of transportation for transporting the workpieces, the rollers having at least one elevation encircling the rollers, the elevations on the first roller of a pair of rollers being staggered relative to the elevation on the second roller of the pair of rollers on the other side of the plane of transportation, and with transport drives associated with the rollers, the workpieces being supplied to the rollers of the at least one pair of rollers in the plane of transportation, said rollers transporting and finally releasing them (fig.1,2) (C2/L21-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson USP 3,945,413 in view of Anderle USP 4,765,273.

Eriksson discloses all the limitations of the claim (see ¶13), but does not expressly disclose the device wherein the elevations have rounded front sides or wherein the

Art Unit: 3651

rollers provided with the elevations are configured to be formed by axles with rings secured thereon.

Anderle teaches the elevations have rounded front sides and wherein the rollers provided with the elevations are configured to be formed by axles (5,6) with rings (17) secured thereon (fig.1,2) for the purpose of providing precise guidance for workpieces (C2/L12-19).

At the time of invention it would have been obvious to one having ordinary skill in the art to employ the elevations with rounded front sides and wherein the rollers provided with the elevations are configured to be formed by axles with rings secured thereon, as taught by Anderle, in the device of Eriksson, for the purpose of providing precise guidance for workpieces.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson USP 3,945,413 (or Lehtinen USP 4,530,383).

With respect to claim 8, Eriksson (or Lehtinen) does not disclose specific values for the height of the elevations. However, one of ordinary skill in the art is expected to routinely experiment with the parameters, especially when the specifics are not disclosed, so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been obvious through routine experimentation and optimization, for one of ordinary skill in the art to have the height of the elevations range from 0.1 to 10 mm.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

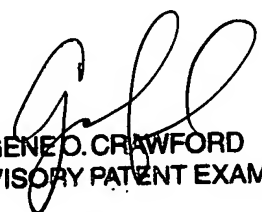
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Nicholson III whose telephone number is 571-272-5487. The examiner can normally be reached on M-F, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.N.
5/1/2006


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